

### **Remarks**

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks. Please add new claims 33-35. Upon entry of this amendment, claims 1-4, 17-18, and 25-35 remain in the application.

### ***Formal Request For Interview***

Upon reviewing this response, if any issues remain, the Examiner is formally requested to contact the undersigned prior to issuance of the next Advisory or Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Response so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused. This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

### ***Patentability Over Hoarty, Davis, Hooper, Gupta, and Inoue***

The Office has asserted a rejection of claims 1-4 as obvious over Hoarty, U.S. Patent No. 5,883,661 ("Hoarty") in view of Davis, U.S. Patent No. 5,898,387 ("Davis") and Hooper, U.S. Patent No. 5,414,455 ("Hooper") and Gupta, U.S. Patent No. 5,799,017 ("Gupta"). The Office has asserted a rejection of claim 17 and 28-32 as obvious over Hoarty in view of Gupta. The Office has asserted a rejection of claim 18 as obvious over Hoarty in view of Gupta and Inoue, U.S. Patent No. 5,729,280 ("Inoue"). Applicants respectfully traverse.

### ***Claim 1***

Applicants have amended claim 1 to more clearly indicate that there is "at least two different and non-compatible video-on-demand applications ... wherein translating comprises translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not the first video-on-demand application."

The present specification is directed at solving different problems than the art of record and thus, the specification solves these various problems in ways not disclosed or discussed in the other references. In one example, the specification discusses a problem that occurs when there are “different brands of video-on-demand *applications*” (page 2, line 15, emphasis added) thereby limiting “expansion options available to existing video on demand systems” (page 3, line 8) because the applications employed by the various servers are “incompatible with ... various video-on-demand clients” (e.g., page 3, line 4). The specification describes a “proxy server” (e.g., page 7, line 16) interposed between a client and server that manages the “control data” (e.g., page 7, line 20) to provide a commodity of video data to the clients. The proxy server receives the control data (e.g., “play”) over the “control data link.” (e.g., page 8, line 27, through page 9, line 9) and instructs the video server accordingly. A video service provider may inherit “client terminals from another (non-compatible) system.” (e.g., page 10, lines 16-17). Such a proxy server integrates clients or servers employing applications with different control data protocols (e.g., page 2, lines 15-17; page 3, lines 1-9, lines 19-20, lines 24-27; page 4, lines 1-4, lines 6-7; page 5, lines 18-21; page 6, lines 13-15; page 7, lines 20-26; page 8, lines 1-3; page 8, lines 18-20; page 10, lines 11-21; etc.). There is simply no discussion in the art of record that would lead one of ordinary skill in the art to either the problem of “two different and non-compatible video-on-demand applications” or to a solution such as “a proxy server” that translates “control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application.”

For example, in Hoarty, there is no discussion of either “two different and non-compatible video-on-demand applications” nor is there a “proxy including a mean for translating” ... “control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application.”

For example, Hoarty discusses a “home interactive controller 42 requests interactive service upon interactive channel selection” and a “system manager assigns a carrier frequency to the requesting subscriber.” Col. 10, lines 33-41. The translation relied on in Hoarty is a translation of packet addresses at the transport level. Col. 14, lines 49-55. No mention is ever made of a different and non-compatible video-on-demand applications, and thus no application translation is discussed or

necessary in Hoarty. Similarly, Davis describes a translation between transport level data packets, but translating incompatible application data is not discussed. Hooper describes applying VCR like controls but no discussion is made of any incompatible application data translation.

Finally, the Office directs Applicants to the following paragraphs in Gupta,

An internal Internetwork Protocol Engine ("IPE") is provided enabling use of industry standard TCP/IP Internetwork which is a superset of all popular, signaling protocols' Internetwork primitives. Col. 2, lines 7-10.

...

The VDO-CPM performs the translation between the IPE messages and the messages used by the user terminals for video services. Col. 10, lines 14-17.

...

FIG. 24 shows the control plane architecture. The logical channel of the Signalling and Control (SCO) control link destined for the Video Distribution Terminal 630 (FIG. 21) is routed to the DET-CPM 56. The DET-CPM performs the translation between the IPE messages and the DET messages. Similarly, call control messages to/from the Video Server are translated to the system IPE by the Server-CPM 56. The DET and the Server can now be internetworked by invoking IPE relay. The SC 656 performs higher level system control functions and provides the switch OAM&P interface. Additional CPMs can be added to interface other signaling and control entities. Col. 31, line 59-67.

Applicants respectfully submit that Gupta fails to disclose the recited arrangement of claim 1. For example, Gupta states that its IPE adapts messages to the SMN's internal system protocol (Gupta, col. 2, lines 48-50). Thus, messages sent from the DET are adapted to the message format of the SMN's internal format. The SMN's internal system protocol is disclosed as a layered communications service comprising a high speed system bus (col. 5, lines 32-39). The high speed system bus consists of three tiers, Tier 0, Tier 1, and Tier 2 (col. 5, lines 50-55). A Tier 0 bus supports up to 16 physical units (col. 6, line 52). Tier 1 supports up to 250 Tier 0 buses, and Tier 2 supports up to 8 Tier 1 buses (Id). The SMN describes two packet formats that travel the high speed bus, a small, and a large packet (col. 10, lines 49-60; FIG. 9 and FIG. 10A). A single set top box does not need to carry all the information in the SMN three tier bus. So Gupta is disclosing that a CPM performs a translation from a more simple message format of a set top box, into a message format that can travel through a bus supporting the IPE message format (col. 10, lines 15).

Notice, for example, that in relation to Figures 10B and 10C, Gupta describes that the packets hold data bytes (col. 12, line 25). One of ordinary skill in the art, would understand that Gupta is describing a message protocol that could be used to transfer data to and from devices of many different kinds. Thus, Gupta is a backbone for carrying data to and from devices according to an SMN message format, traveling through a three tier high speed bus. Gupta does not disclose any translation at the application level.

In a further example, Gupta generally describes the ISO network standard (col. 29, line 7). Gupta describes how a foreign protocol is “opened up to Layer 3 before cross-connection to a SMN computer or channel unit” (col. 28, lines 30-32). For example, in FIG. 17, a protocol processor opens up to level three to conform a foreign protocol thereby relieving the foreign computer from performing protocol conversion. Thus, one of ordinary skill in the computer arts, would understand that Gupta is discussing Layer 2 (Data Link Layer) and Layer 3 (Network Layer) ISO translation and not application level translation (ISO Layer 7). There is simply no discussion of opening up or translating any higher layer.

There is simply no combination of, or suggestion in, Hoarty, Gupta, Davis, Inoue, and/or Hooper, that would lead one of ordinary skill in the art to the arrangement of amended claim 1. For at least this reason, amended claim 1 is allowable. Such action is respectfully requested.

### ***Claims 2***

Claims 2, 3 and 4 depend from claim 1. Since they depend from claim 1, they should be allowed for at least the reasons stated for claim 1. In view of the foregoing discussion of claim 1, the merits of the separate patentability of dependent claims 2, 3, and 4 are not belabored at this time. Claims 2, 3 and 4 should be allowable. Such action is respectfully requested.

### ***Patentability over Hoarty in View of Gupta***

The Office has asserted a rejection of claims 17, and 28-32 as obvious over Hoarty in view of Gupta. Applicants respectfully traverse.

***Claim 17***

Applicants respectfully submit that the art of record fails to teach or suggest “at least two non-compatible video-on-demand applications, ... wherein the proxy server translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible components into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications.

For example, Hoarty discusses a “home interactive controller 42 requests interactive service upon interactive channel selection” and a “system manager assigns a carrier frequency to the requesting subscriber.” Col. 10, lines 33-41. The translation relied on in Hoarty is a translation of packet addresses at the transport level. Col. 14, lines 49-55. No mention is ever made of different and non-compatible video-on-demand applications, and thus no application level translation is discussed or necessary in Hoarty.

Next, Gupta fails to disclose the recited arrangement of amended claim 17. For example, Gupta states that its IPE adapts messages to the SMN’s internal system protocol (Gupta, col. 2, lines 48-50). Thus, messages sent from the DET are adapted to the message format of the SMN’s internal format. The SMN’s internal system protocol is disclosed as a layered communications service comprising a high speed system bus (col. 5, lines 32-39). The high speed system bus consists of three tiers, Tier 0, Tier 1, and Tier 2 (col. 5, lines 50-55). A Tier 0 bus supports up to 16 physical units (col. 6, line 52). Tier 1 supports up to 250 Tier 0 buses, and Tier 2 supports up to 8 Tier 1 buses (Id). The SMN describes two packet formats that travel the high speed bus, a small, and a large packet (col. 10, lines 49-60; FIG. 9 and FIG. 10A). A message protocol for a single set top box, would not carry all the information in the SMN three tier bus. So Gupta is disclosing that a CPM performs a translation from a more simple message format output of a set top box, into a message format that can travel through a bus supporting the IPE message format (col. 10, lines 15).

Notice, for example, that in relation to Figures 10B and 10C, Gupta describes that the packets hold data bytes (col. 12, line 25). One of ordinary skill in the art, would understand that Gupta is describing a message protocol that could be used to transfer data to and from devices of many different kinds. Thus, Gupta is a backbone for carrying data to and from devices according to an SMN message

format, traveling through a three tier high speed bus. Gupta does not disclose any translation at the application level.

In a further example, Gupta generally describes the ISO network standard (col. 29, line 7). Next, Gupta describes how a foreign protocol is “opened up to Layer 3 before cross-connection to a SMN computer or channel unit” (col. 28, lines 30-32). For example, in FIG. 17, a protocol processor opens up to level three to conform a foreign protocol thereby relieving the foreign computer from performing protocol conversion. Thus, one of ordinary skill in the computer arts, would understand that Gupta is discussing Layer 2 (Data Link Layer) and Layer 3 (Network Layer) ISO translation and not application level translation (Layer 7). There is simply no discussion of opening up or translating any higher layer.

There is simply no combination of, or suggestion in, Hoarty and/or Gupta that would lead one of ordinary skill in the art to the arrangement of amended claim 17. For at least this reason, amended claim 17 is allowable. Such action is respectfully requested.

### ***Claim 18***

Claim 18 depends from claim 17, and should be allowed for at least the reasons stated for claim 17. In view of the foregoing discussion of claim 17, the merits of the separate patentability of dependent claim 18 is not belabored at this time. Claim 18 should be allowable. Such action is respectfully requested.

### ***Independent Claims 25, 28, 31, and 32***

Applicants respectfully submit that for reasons similar to those stated above, such as for claim 17, a Hoarty-Gupta combination fails to teach or suggest the following features:

Claim 25 - “wherein the proxy server translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible video-on-demand applications into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications.”

Claim 28 - “wherein the method translates to and from control data of the first video-on-demand application and control data of the second video-on-demand application thereby facilitating video-on-demand control between two or more components communicating according to two or more non-compatible video-on-demand applications.”

Claim 31 - “the method translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not the first video-on-demand application and the sent and received application control data comprising the first and second video-on-demand application is transmitted according to a same network communication protocol.”

Claim 32 – “wherein the proxy server translates between control data compatible with the first on-demand video application but not compatible with the second on-demand video application and control data compatible with the second on-demand video application but not compatible with the first on-demand video application, the translation facilitating integration of components communicating according to two or more non-compatible on-demand video applications.”

Since a Hoarty-Gupta combination fails to teach or suggest these features of independent claims 25, 28, 31, and 32, they should be allowable.

### ***Dependent Claims 26-27, 29, and 30***

Claims 26-27, 29, and 30 depend from the above allowable independent claims. Since claims 26-27, 29, and 30 depend from the above allowable independent claims, they should be allowed for at least the above reasons. Such action is respectfully requested.

### ***Patentability over Hoarty***

The Office has asserted a rejection of claims 25-27 as anticipated by Hoarty. Applicants respectfully traverse. For the reasons stated above, Hoarty fails to teach or suggest a “proxy server translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible video-on-demand applications into an existing system by providing translation between components communicating according to two or more non-compatible

video-on-demand applications.” Since claims 26-27 depend from allowable claim 25, they should be allowed for at least the same reasons. Such action is respectfully requested.

***35 USC § 112***

Claim 32 has been amended to overcome the 35 USC §112 rejection. Claim 32 should now be in condition for allowance. Such action is respectfully requested.

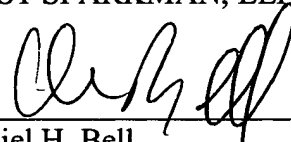
**Conclusion**

The claims in their present form should now be allowable. If the Examiner does not agree, please refer to Applicants Formal Request for an Interview. Such action is respectfully requested.

Respectfully submitted,

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